

OPERATING INSTRUCTIONS

SUN UNIVERSAL COMPRESSION TESTER

Model UCT - 48

INITIAL SET-UP

1. Run engine until normal operating temperature is reached.
2. Stop engine. Remove any components necessary to gain access to spark plugs.
3. Disconnect spark plug wires, loosen all spark plugs approximately ONE turn and reconnect wires.
4. Start engine and accelerate to approximately 1000 R.P.M. Reduce speed to idle and turn vehicle's ignition switch OFF.

NOTE: Steps 3 and 4 are necessary to remove the carbon flakes caused by normal loosening of the spark plugs. Unless removed, these may become lodged under a valve and cause inaccurate test results.

5. Using compressed air, clean all spark plug wells.
6. Remove all spark plugs and seat gaskets or tubes if used.
7. Set carburetor throttle valve to wide open position.
8. Connect tester's leads to starter relay or solenoid "Switch" or "Solenoid" terminal and the "Battery" or "Ground" depending on type of control and circuit being used.

CAUTION: On vehicles having 12 volt ignition systems with resistor by-pass circuits, use a jumper wire and ground either the distributor primary terminal or the distributor end of the coil high tension wire.

COMPRESSION TEST

1. Select proper adapter and screw into spark plug port opening finger tight. "Quick-connect" other end of adapter to test gauge.
2. Move tester control switch to CRANK position and crank engine continuously until FOUR full compression strokes are completed.
3. Note gauge readings at end of First and Fourth strokes. Record test results.
4. Release pressure from gauge by moving tester control switch to VENT position. Disconnect tester from adapter and remove adapter from cylinder.
5. Repeat steps 1 through 4 on all remaining cylinders.
6. Compare test results to specifications for engine being tested.

If fourth stroke readings for all cylinders are within the specified range or above the specified minimum and do not vary by more than the specified amount, the engine has satisfactory compression.

If not as specified, See Test Indications.

TEST INDICATIONS

RING TROUBLE	Compression low on first stroke, tends to build up on following strokes but does not reach normal. Improves considerably with addition of oil.
VALVE TROUBLE	Low on first stroke, does not build up much on following strokes. Does not improve much with the addition of oil.
HEAD GASKET LEAK	Same reaction as valve trouble on two adjacent cylinders. Usually accompanied by spark plug deposits indicating water and/or oil.
CARBON DEPOSITS	Pressure readings considerably higher than specified.

NOTE: To determine the exact cause of abnormal compression test results, use the Sun Cylinder Leakage Tester.